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Fusion Prototypic Neutron Source

LANL May Monthly Update

Eric Pitcher

23 May 2019

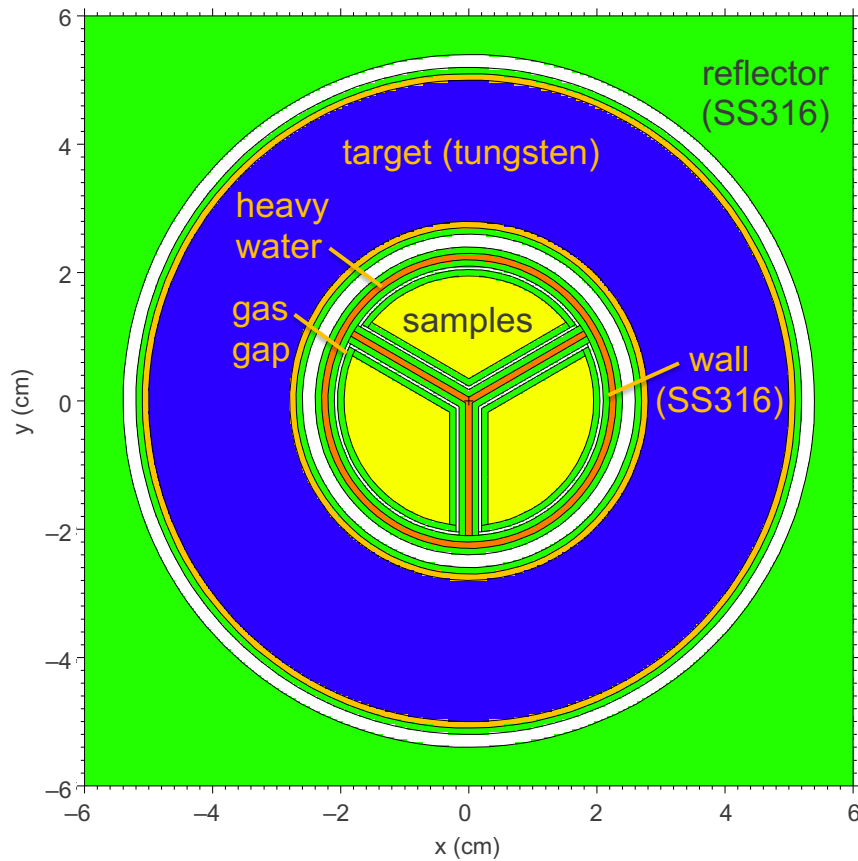


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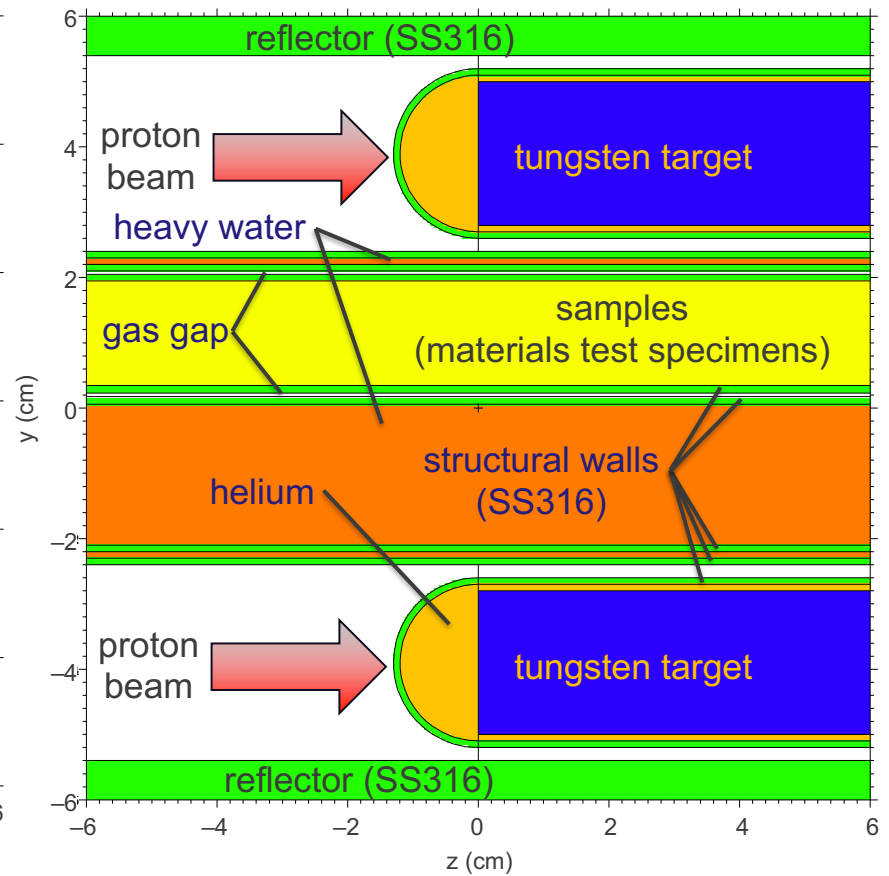
Highlights

- Target concept developed and neutronic optimization well under way
 - Concept consists of an annular spallation target surrounding a cylindrical irradiation region containing the materials test specimens
 - Preliminary results indicate the concept satisfies nearly all of the key performance guidelines set out in last fall's workshop
- Accelerator beam transport and beam expansion concept developed
 - Beam expansion based on rastering a focused beam spot over an annular footprint
 - Beam transport takes advantage of a lot of existing infrastructure but would require new magnet power supplies, diagnostics, and I&C
- Report outline drafted and drafting of some report sections has started

Target concept



FRONT VIEW



SIDE VIEW